

## New record of the humming frog *Chiasmocleis supercilialbus* Morales and McDiarmid, 2009 (Amphibia: Microhylidae) in Brazil, the first outside its type locality

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**ABSTRACT:** We provide the first record of *Chiasmocleis supercilialbus* for Brazil. Thre especimens were collected at Seringal Etelvi, Reserva Extrativista Chico Mendes, state of Acre, Brazil. This record extends the distribution of the species 200 km east from the type locality situated at Manu National Park, Manu River, Departamento Madre de Dios, Peru.

Chiasmocleis Méhelÿ, 1904 is the most diverse Microhylidae genus in the neotropics (Frost 2012) consisting of 25 species, distributed in most of tropical South America north and east of the Andes (Caramaschi and Cruz 2001; Frost 2012). Twenty-one of these species occur in Brazil (SBH 2010; Rodrigues et al. 2011) and six are associated with the Brazilian Amazonian Rainforest: C. bassleri Dunn, 1949; C. hudsoni Parker, 1940; C. jimi Charamaschi&Cruz, 2001; C. shudikarensis Dunn, 1949; C. ventrimaculata (Andersson, 1945), and C. avilapiresae Peloso andSturaro, 2008.

For most of the known species, there is a lack of data on geographical distribution and ecology, (see Peloso and Sturaro 2008; Melo-Sampaio *et al.* 2010), with some species known only from their type localities (Frost 2012). Several species of the genus are morphologically very similar, making identification problematic and prone to mistakes (Peloso and Sturaro 2008).

Chiasmocleis supercilialbus was described in 2009 from the Manu National Park, in Peru by Morales and McDiarmid (2009), whom suggested a resemblance to C. bassleri. According to the original description, C. supercilialbus differs from C. bassleri in having a rounded snout (protruding in C. bassleri); presence of finger and toe discs (missing in C. bassleri); and presence of dermal spines (absent in C. bassleri) (Morales and McDiarmid 2009). From those characters, only dermal spines seem to be a consistent character (P.L.V.P. unpublished data) helpful to distinguish among species. Santana et al. (2009) described the call of *C. bassleri* (based on a single call of a population from Aripuanã, Mato Grosso, Brazil). Based on that description and the one provided by Morales and McDiarmid (2009) for C. supercilialbus, it appears they differ slightly in the values for dominant frequency (higher in C. bassleri) and also in call structure. More detailed analyses of a larger number of calls of both species are

necessary to evaluate the amount of divergence between the calls of both species.

During fieldwork in the Reserva Extrativista Chico Mendes, Brasiléia, State of Acre, Brazil (10°45'05" S, 69°18'15" W) we collected three individuals of C. supercilialbus. Fieldwork was conducted in the months of October 2011, December 2011, and January 2012. Specimens were captured in pitfall traps placed in culture plantations of cupuaçu (Theobroma grandiflorum), pupunha (Bactris spp.) and rubber trees (Hevea brasiliensis), at "Seringal Etelvi". Specimens were killed and fixed in accordance with guidelines of the American Society of Ichthyologists and Herpetologists and were deposited in the Coleção de Herpetologia da Universidade Federal do Acre, Campus Floresta in Cruzeiro do Sul, Acre, Brazil (UFACF 4082, 4083 and 4084). Permit number 25261-1 System Biodiversity Information and Authorization - SISBIO -Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio).



**FIGURE 1.** Lateral view of a *Chiasmocleis supercilialbus*, found at Extractive Reserve Chico Mendes, Acre, Brazil (by Marco Antonio de Freitas).

This is the first record of *C. supercilialbus* for Brazil, located about 200 km east from the type locality, Manu National Park, (11°56' S, 71°18' W), Rio Manu, Madre de Dios, Peru.

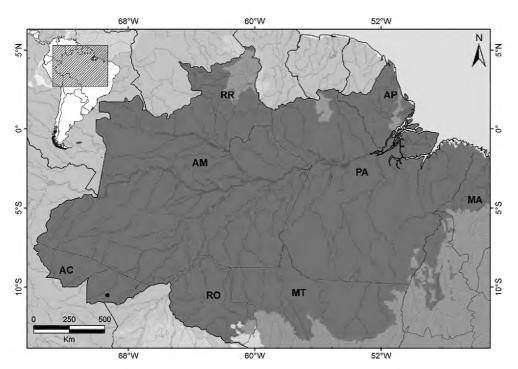


FIGURE 2. Distribution map for Chiasmocleis supercilialbus in Brazil, a new record for the Reserva Extrativista Chico Mendes, Acre, Brazil.

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## LITERATURE CITED

Caramaschi, U and C.A.G. Cruz. 2001. A new species of *Chiasmocleis* Méhelÿ, 1904 from Brazilian Amazonia (Amphibia, Anura, Microhylidae). Boletim do Museu Nacional (N.S.) Zoologia 469:1-8.

Frost, D.R. 2012. Amphibian Species of the World: An on line reference. Version 4. American Museum of Natural History, New York. Version 5.5. Electronic Database accessible at: http://research.amnh.org/ herpetology/amphibia/index.html. Captured on 26 October 2012.

Melo-Sampaio, P.R., T.R.B. da-Silva and P.L.V. Peloso. 2010. Amphibia, Anura, Microhylidae, Chiasmocleis avilapiresae Peloso and Sturaro, 2008: First record for the state of Acre, southwestern Amazonia, Brazil. Check List 6: 655-656.

Morales, V.R. and R.W. McDiarmid. 2009. A new species of Chiasmocleis (Anura: Microhylidae) from southern Amazonian Peru with comments on some other michrohylids. *Biotempo* 9:71-76.

Peloso, P.L.V. and M.J. Sturaro. 2008. A new species of narrow-mouthed frog of the genus ChiasmocleisMéhelÿ, 1904 (Anura, Microhylidae) from the Amazonian rainforest of Brazil. Zootaxa1947:39-52.

Rodrigues, D.J., J.C. Noronha, M.M. Limaand and A.C. Rosa. 2011. Amphibia, Anura, Microhylidae, Chiasmocleis avilapiresae Peloso and Sturaro, 2008 and Chiasmocleis bassleri Dunn, 1949: New Distributionrecords. CheckList 7: 846-848.

Santana, D.J., A.C. Sant'Anna, V.A. São-Pedro and R.N. Feio. 2009. The advertisement call of Chiasmocleis bassleri (Anura, Microhylidae) from southern Amazon, Mato Grosso, Brazil. South American Journal of Herpetology 4: 225-228.

SBH 2010.Sociedade Brasileira de Herpetologia, Brazilian amphibians - List of species. Electronic Database accessible at http://www. sbherpetologia.org.br. Captured on 26 January 2012.

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